

INSPECTION REPORT

APPLICABLE DOC. REF.

AMS02-PDS PFM Manufacturing and Inspection Plan PDS-PL-CGS-001
is. 1

PROC. REF.

N.A.

ITEM INSPECTED (Name, P/N, S/N) AMS02-PDS PFM – BOARDS — Inspection Point.

REQUIREMENT SATISFIED

Manufacturing according to aerospace standards

INSPECTION (Action/Results)

DESCRIPTION

Inspection was performed at Carlo Gavazzi Space premises starting on 30 May 2008 and was carried out on the following boards, detail of the inspected boards were below reported:

- 1) PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07-038 / C.
- 2) PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07-038 / D.
- 3) PB2 MODULE ASSY p/n:11-AMS02PDS-700.00 s/n:04 (pcb s/n:07-009/A).
- 4) PB2 MODULE ASSY p/n:11-AMS02PDS-700.00 s/n:05 (pcb s/n:07-006/A).

HARDWARE REVIEW

1) PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07-038 / C, Assy:11-AMS02PDS-710.00 rev./, Parts List: 11-AMS02PDS-710.01rev.A, Electrical Scheme: 11-AMS02PDS-710.02 rev./, Master PCB:11-AMS02PDS-710.03 rev./.

The following PLVSs (Parts List Variation Sheet) were presented during the inspection:

- 11-AMS02PDS-710.01 rev A - A1 can be considered closed.
- 11-AMS02PDS-710.01 rev A - A2 can be considered closed.

On the pcb the U8 (A1020B-CQ84B FPGA) component is not mounted.

The H/W has been visually inspected and is ok: no damage, visible clean is ok.

2) PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07-038 / D, Assy:11-AMS02PDS-710.00 rev./, Parts List: 11-AMS02PDS-710.01rev.A, Electrical Scheme: 11-AMS02PDS-710.02 rev./, Master PCB:11-AMS02PDS-710.03 rev./.

The following PLVSs (Parts List Variation Sheet) were presented during the inspection:

- 11-AMS02PDS-710.01 rev A - A1 can be considered closed.
- 11-AMS02PDS-710.01 rev A - A2 can be considered closed.

On the pcb the U8 (A1020B-CQ84B FPGA) component is not mounted.

The H/W has been visually inspected and is ok: no damage, visible clean is ok.

Operator

Quality Assurance

C.C.

Signature

Date

E. FRANCINI
04/06/08

C. CINQUEPACCHI
C. Cinqu
12/06/08

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3) PB2 MODULE ASSY p/n:11-AMS02PDS-700.00 s/n:04 (pcb s/n:07-009/A), Assy:11-AMS02PDS-700.00 rev./, Parts List:11-AMS02PDS-700.01 rev./, Electrical Scheme:11-AMS02PDS-700.02 rev./, Master PCB: SPO-PD-020500-DR-03-CGS rev./.

The following NCRs were presented during the inspection:

- NCR-PDS-CGS-C-006(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the component C47 with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- NCR-PDS-CGS-C-031(PB2 outlet lines design improvement), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-048(PB2 board bracket conductance optimization), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: mount card-retainer MWEN226-8.00TM2LR.

The following PLVs (Parts List Variation Sheet) were presented during the inspection:

- 11-AMS02PDS-700.01 rev / - A1 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A2 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A3 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A4 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A9 is still open.
- 11-AMS02PDS-700.01 rev / - A12 can be considered closed.

On the pcb the U11 (AD590) and L5 (inductor 11-AMS02PDS-700.08 rev./) components are not mounted.

The H/W has been visually inspected and is ok: no damage, visible clean is ok.

4) PB2 MODULE ASSY p/n:11-AMS02PDS-700.00 s/n:05 (pcb s/n:07-006/A), Assy:11-AMS02PDS-700.00 rev./, Parts List:11-AMS02PDS-700.01 rev./, Electrical Scheme:11-AMS02PDS-700.02 rev./, Master PCB: SPO-PD-020500-DR-03-CGS rev./.

The following NCRs were presented during the inspection:

- NCR-PDS-CGS-C-007(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the component C47 with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- NCR-PDS-CGS-C-032(PB2 outlet lines design improvement), NCR classified "minor" is closed.
- NCR-PDS-CGS-C-048(PB2 board bracket conductance optimization), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: mount card-retainer MWEN226-8.00TM2LR.

Operator

Quality Assurance

C.C.

Signature

Date

E. FRANCIOSI
04/06/08C. CINQUEPACI
C. CINQUEPACI
12/06/08

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INSPECTION (Action/Results)

The following PLVss (Parts List Variation Sheet) were presented during the inspection:

- 11-AMS02PDS-700.01 rev / - A1 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A2 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A3 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A4 can be considered closed.
- 11-AMS02PDS-700.01 rev / - A9 is still open.
- 11-AMS02PDS-700.01 rev / - A12 can be considered closed.

On the pcb the U11 (AD590) and L5 (inductor 11-AMS02PDS-700.08 rev./) components are not mounted.
The H/W has been visually inspected and is ok: no damage, visible clean is ok.

CONCLUSION

All solder joints are of adequate quality, the soldering process complies to ECSS-Q-70-08 and ECSS-Q-70-38, all modifications are performed according to ECSS-Q-70-28.

The open points are here listed:

- 1) On PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07-038 / C the U8 (A1020B-CQ84B FPGA) component is not mounted.
- 2) On PB2 FPGA BOARD ASSY p/n:11-AMS02PDS-710.00 s/n:07-038 / D the U8 (A1020B-CQ84B FPGA) component is not mounted.
- 3) NCR-PDS-CGS-C-006(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the component C47 with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- 4) NCR-PDS-CGS-C-048(PB2 board bracket conductance optimization), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: mount card-retainer MWEN226-8.00TM2LR.
- 5) On PB2 MODULE ASSY p/n:11-AMS02PDS-700.00 s/n:04 (pcb s/n:07-009/A) and PB2 MODULE ASSY p/n:11-AMS02PDS-700.00 s/n:05 (pcb s/n:07-006/A) the PLVS:11-AMS02PDS-700.01 rev / - A9 is still open.

Operator

Quality Assurance

C.C.

Signature

Date

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e. Cuper

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CARLO GAVAZZI

CARLO GAVAZZI SPACE SpA

AMS02-PDS

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ISSUE : 1 DATE: 04/06/2008

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- 6) PB2 MODULE ASSY p/n:11-AMS02PDS-700.00 s/n:04 (pcb s/n:07-009/A) the U11 (AD590) and L5 (inductor 11-AMS02PDS-700.08 rev./) components are not mounted.
- 7) NCR-PDS-CGS-C-007(electronic components assembly problems), NCR classified "minor" is still open during the inspection activity, the following corrective actions will be performed: glue the component C47 with adhesive EC 2216 B/A, perform a visual inspection of the previous rework.
- 8) On PB2 MODULE ASSY p/n:11-AMS02PDS-700.00 s/n:05 (pcb s/n:07-006/A) the U11 (AD590) and L5 (inductor 11-AMS02PDS-700.08 rev./) components are not mounted.

Operator

Quality Assurance

C.C.

Signature

Date

E. FRANCINI
04/06/08

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